REMARKS

Claims 1, 2, 8-10, 13, 14, 16 and 18-21 are pending. Claims 10, 13, 14, 18, and 21 are rejected. Claims 1, 2, 8, 9, 16 and 20 are allowed. Claim 19 is not reported as rejected or allowed. Claim 10 is amended.

Rejection under 35 USC § 112 ¶2

Claim 10 rejected

Claim 10 has been amended to recite "plants" instead of "plans" and is now in an allowable condition.

Rejection under 35 USC §§ 102 and 103

The Examiner maintained the rejection of Claims 13, 14, 18 and 21 (including Claim 19 if Examiner has maintained rejection of said Claim without notation on the Office Action Summary sheet) under 35 USC § 102(b) as being anticipated by the teaching of Saur et al. (CA 2,178,655) for the reasons of record taking the position that Saur et al. show the compositions referenced in Applicants' claims or in the alternative as obvious in light of Saur et al. under 35 USC § 103 (a)

Anticipation can only be established by a single prior art reference which discloses each and every element of the claimed invention. *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). "The identical invention must be shown in as complete detail as it is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The Examiner has failed to make the required showing.

To establish *prima facie* obviousness, the Examiner must show in the prior art some suggestion or motivation to make the claimed invention, a reasonable expectation for success in doing so, and a teaching or suggestion of each claim element (*see, e.g., In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ 2d 1941 (Fed. Cir. 1992); *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986); *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

OA August 11, 2005   5

The Examiner has failed to make the required showing.

The Examiner maintains the instant Claims are drawn to a composition (see page two of the Office Action dated August 11, 2005 wherein the Examiner states "[t]he claims are drawn to a composition"). The Applicants' respectfully disagree. Applicants' Claims are directed towards a process. The Examiner is directed to the Claims of the instant invention wherein all rejected Claims recite a "process" (see e.g. Claim 13 wherein the following is recited "[i]n a process for the preparation of CR granules..." emphasis added).

Applicants reiterate the following arguments. The teaching of Saur et al. relates to granules or pellets which are adapted for a controlled release of crop protection agents by providing the granules or pellets with a coating of an ethylene copolymer wax (see page 1, lines 7-38 of the cited Specification). According to the teaching of Saur et al., the granules or pellets are obtained by applying one or more active compounds to a solid carrier in a fluidized bed apparatus or in drums or rotary disks at a temperature of from 10 to 110°C (see cited Specification page 5, indicated lines 22 to 36), subsequently coating the active-ingredient-containing carrier with the wax in a fluidized bed apparatus or in drums or rotary disks at a temperature of from 10 to 110°C (see page 5, indicated line 38 et seq., in conjunction with page 7, indicated lines 4 to 31 of the cited reference). In addition to the generic description of the coating conditions, Saur et al. disclose examples in which a coating polymer wax is applied to active-ingredient-containing carrier particles in a fluidized bed apparatus at air inlet and outlet temperatures of from about 40 to about 50°C (see examples 1 to 16, pages 10 to 13, and Example 31, page 14, of the cited reference).

Applicants' invention relates to controlled release granules having a polymer coating which is applied to the carrier in a fluidized bed with a defined heat input of from about 11,864 to 25,000 kJ/kg of coating polymer (see Claim 1 of the cited reference), the respective heat input (Q_{pol}) being defined by the formula (see page 57, lines 15-25 of the instant Specification)

$$Q_{pol} = DT \ V \ t \ C_p / m_{pol}$$

wherein

DT   is the temperature difference between the inlet air temperature and the outlet air temperature,

V   is the gas volume flow,

t   is the total residence time of the sample,

C_p is the gas constant, and

m_{pol} is the amount of polymer in the batch.

More particularly, applicants have found that the heat input which is employed when the coating polymer is applied to the carrier granules has a distinct impact on the rate at which the active ingredient is released from the controlled release granules.

The teaching of Saur et al. does not provide generic or specific information which concerns the gas volume flow. The teaching of Saur et al. therefore fails to suggest to a person of ordinary skill in the art that the heat input per kg of coating polymer is of essence, and also fails to imply heat input values within any particular range. Moreover, based on the information which is provided by the teaching of Saur et al. it is not even possible to estimate or calculate the heat input in kJ/kg of coating polymer which was employed in the examples described by Saur et al. As such, the teaching of Saur et al. cannot be deemed to identically show the subject matter which is defined in Applicants' Claims in as complete detail as is contained in the claim as is necessary for a finding of anticipation under Section 102. Also, as seen from the above definition of the heat input (Q_{pol}), the gas volume flow is directly proportional to the heat input value. Accordingly, if the gas volume flow is altered, for example, from 280 m³/h to 400 m³/h, corresponding to an increase by a factor of 1.43, the heat input value increases correspondingly (see Applicants' comparative Example 2, page 37, indicated line 43, to page 38, indicated line 17, of the application, and Applicants' representative Example 3, page 39, indicated line 17, to page 14, of the application). That means that coating conditions which provide for a heat input value of 10,000 kJ/kg of coating polymer when the gas flow volume is 280 m³/h provide for a heat input value of 14,300 kJ/kg of coating polymer when the gas flow value is increased to 400 m³/h. It is immediately apparent from this calculation, that not all coating procedures which are conducted in a fluidized bed apparatus at a temperature of from 10 to 110°C inherently provide for conditions where the heat input is within the limits of from about 11,864 to 25,000 kJ/kg of coating polymer as required in accordance with Applicants' invention.

The Examiner also criticized Dr. Stadler's Declaration for not addressing the heat application of 110°C which is disclosed by Saur et al. as upper temperature limit for the preparation of coated granules. It is respectfully noted that the heat input Q_{pol} correlates to a temperature difference, DT,

between the air inlet temperature and the air outlet temperature and not to the temperature at which the coating procedure itself is conducted. It is therefore of subsidiary impact on the heat input value whether the coating process is conducted at a temperature in the fluidized bed of 10°C or at a bed temperature of 110°C. Also, and as mentioned at the outset, it is well settled that a generic range is not an anticipating disclosure of each and every value which happens to fall within its realm.

A person of ordinary skill in the art cannot reasonably arrive at the coating conditions which are required in accordance with Applicants' invention by merely selecting a bed temperature from the range of from 10 to 110°C mentioned by Saur et al. Rather, to arrive at the coating conditions which are required in accordance with applicants' invention, such a person has to adjust

(1)   the temperature difference between the inlet air temperature and the outlet air temperature,

(2)   the gas volume flow, and

(3)   the total residence time of the sample,

in relation to the amount of polymer which is employed in the batch in order to arrive at coating conditions which provide for a heat input within the range defined in Applicants' claims.

For at least the foregoing and the arguments already presented by Applicants' in their previous replies it is therefore respectfully requested that the rejection of Claims 13, 14, 18 and 21 (and Claim 19 – see above) under Sections 102(b) and 103(a) based on the teaching of Saur et al. be withdrawn. Favorable action is respectfully solicited.